

PTO/SB/20 (09-07)

Approved for use through 12/31/2008. OMB 0851-0058
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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REQUEST FOR PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM BETWEEN THE (1) JPO OR (2) UKIPO, AND THE USPTO

Application No.:	10/528,151	First Named Inventor:	Shinya KADONO et al.
Filing Date:	March 17, 2005	Attorney Docket No.:	2005-0443A
Title of the Invention:	PICTURE CODING METHOD		

THIS REQUEST FOR PARTICIPATION IN THE PPH PILOT PROGRAM MUST BE FAXED TO:
 THE OFFICE OF THE COMMISSIONER FOR PATENTS AT 571-273-0125 DIRECTED TO THE ATTENTION OF MAGDALEN GREENLIEF

APPLICANT HEREBY REQUESTS PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM AND PETITIONS TO MAKE THE ABOVE-IDENTIFIED APPLICATION SPECIAL UNDER THE PPH PILOT PROGRAM.

The above-identified application validly claims priority under 35 U.S.C. 119(a) and 37 CFR 1.55 to one or more corresponding JPO application(s) or UKIPO application(s).

The ☐ JPO ☐ UKIPO application number(s) is/are: (See Attachment)

The filing date of the ☐ JPO ☐ UKIPO application(s) is/are: (See Attachment)

I. List of Required Documents:

- a. A copy of all JPO office actions (excluding "Decision to Grant a Patent") in the above-identified JPO application(s), or a copy of all UKIPO office actions in the above-identified UKIPO application(s).

☒ Is attached.

☐ Is available via Dossier Access System. Applicant hereby requests that the USPTO obtain these documents via the Dossier Access System.

*It is not necessary to submit a copy of the "Decision to Grant a Patent" and an English translation thereof.

- b. A copy of all claims which were determined to be patentable by the JPO in the above-identified JPO application(s), or a copy of all claims which were determined to be patentable by the UKIPO in the above-identified UKIPO application(s).

☒ Is attached.

☐ Is available via Dossier Access System. Applicant hereby requests that the USPTO obtain these documents via the Dossier Access System.

- c. English translations (where applicable) of the documents in a. and b. above along with a statement that the English translations are accurate are attached.

Information disclosure statement listing the documents cited in the JPO office actions or UKIPO office actions is attached.

Copies of all documents are attached except for U.S. patents or U.S. patent application publications.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 119, 37 CFR 1.55, and 37 CFR 1.102(d). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. FAX COMPLETED FORMS TO: Office of the Commissioner for Patents at 571-273-0125, Attention: Magdalen Greenleaf.

PTO/SB/20 (09-07)
Approved for use through 12/31/2008. OMB 0051-0068

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**REQUEST FOR PARTICIPATION IN THE PATENT PROSECUTION HIGHWAY (PPH) PILOT PROGRAM
BETWEEN THE (1) JPO OR (2) UKIPO, AND THE USPTO**
(continued)

Application No.:

First Named Inventor:

II. Claims Correspondence Table:

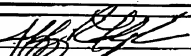
Claims in US Application	Patentable Claims in JP/UKIPO Application	Explanation regarding the correspondence
24	1	
25	2	
26	3	
27	7	

III. All the claims in the US application sufficiently correspond to the patentable/allowable claims in the JPO or UKIPO application.

IV. Payment of Fees:

The Commissioner is hereby authorized to charge the petition fee under 37 CFR 1.17(h) as required by 37 CFR 1.102(d) to ☒ Deposit Account No. 23-0975

☐ Credit Card. Credit Card Payment Form (PTO-2038) is attached.

Signature 	Date <u>November 11, 2007</u>
Name (Print/Typed) <u>Jeffrey R. Filipek</u>	Registration Number <u>41,471</u>

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2908. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Attachment to Request for Participation in Patent Prosecution Highway (PPH) Pilot Program

The present U.S. application (10/528,151) is the U.S. National Stage of International Application PCT/JP2003/15699, which claims priority to (a) JP 010233, filed January 17, 2003, and (b) JP 010551, filed January 20, 2003.

The JPO application that is the subject of this PPH request is (c) JP 2003-403158, which is the Japanese National Stage of International Application PCT/JP2003/15699. The subject JPO application (c) JP 2003-403158 also claims priority to (a) JP 010233 and (b) JP 010551.

The attached copies of all JPO office actions, and the attached copy of all claims which were determined to be patentable by the JPO are from the Japanese National Stage application (c) JP 2003-403158.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Serial NO.:10/528,151

Filing Date: December 9, 2003

For: Video encoding method

VERIFICATION OF TRANSLATION

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Atsuko FUJIHARA residing at 8-7, Shigitahigashi 1-chome, Joto-ku, Osaka-shi,
Osaka, 536-0017 Japan declares:

- (1) that she knows well both the Japanese and English languages;
- (2) that she translated the patentable claims from JP2003-403158 from Japanese to English;
- (3) that the attached English translation is a true and correct translation of the patentable claims from JP2003-403158 to the best of her knowledge and belief and
- (4) that all statements made of her own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such false statements may jeopardize the validity of the application or any patent thereon.

This 2nd day of November, 2007

Atsuko Fujihara

Atsuko FUJIHARA

What is claimed is:

1. A moving picture coding method for generating a coded stream by coding a moving picture signal on a picture-by-picture basis,

5 wherein said moving picture coding method comprises the following steps performed when coding a current picture to be coded which is included in a random access unit including: pictures belonging to a group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture which is a second random access point; and parameter sets for decoding the pictures, the current picture being located after the first I-picture in coding order,

10 said moving picture coding method comprises:
15 a first coding step of coding a parameter set selected for decoding the current picture to be coded;
a second coding step of coding the current picture to be coded based on the contents included in the selected parameter set; and
a coded stream generating step of generating a coded stream
20 so that the selected and coded parameter set is located before the coded first picture in the random access unit including the first I-picture, the selected and coded parameter set being unnecessary for the first I-picture.

25 2. A moving picture decoding method for generating a moving picture signal by decoding a coded stream generated by coding a random access unit including: pictures belonging to a group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture which is a second random access point; and parameter sets for decoding the pictures,

30 said moving picture decoding method comprising:

an extracting step of extracting a coded first parameter set located before a coded first I-picture in the random access unit including the first I-picture;

5 a parameter set decoding step of decoding the coded first parameter set extracted in said extracting step; and

a picture decoding step of decoding, using the decoded first parameter set, a current coded picture to be decoded which is included in the random access unit and which is located after the first I-picture in coding order.

10

3. A moving picture decoding method according to Claim 2, further comprising:

15 a second extracting step of extracting a coded second parameter set located before the coded first I-picture in the random access unit including the first I-picture;

a second parameter set decoding step of decoding the coded second parameter set; and

20 a second picture decoding step of decoding, using the decoded second parameter set, the current coded I-picture to be decoded.

4. A moving picture coding apparatus which generates a coded stream by coding a moving picture signal on a picture-by-picture basis,

25 wherein said moving picture coding apparatus is intended for coding a current picture to be coded which is included in a random access unit including: pictures belonging to a group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture
30 which is a second random access point; and parameter sets for decoding the pictures, the current picture being located after the first I-picture in coding order,

said moving picture coding apparatus comprises:

a first coding unit operable to code a parameter set selected for decoding the current picture to be coded;

5 a second coding unit operable to code the current picture to be coded based on the contents included in the selected parameter set; and

a coded stream generating unit operable to generate a coded stream so that the selected and coded parameter set is located before the coded first picture in the random access unit including the
10 first I-picture, the selected and coded parameter set being unnecessary for the first I-picture.

5. A moving picture decoding apparatus which generates a moving picture signal by decoding a coded stream generated by
15 coding a random access unit including: pictures belonging to a group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture which is a second random access point; and parameter sets for decoding the pictures,

20 said moving picture decoding apparatus comprising:

an extracting unit operable to extract a coded first parameter set located before a coded first I-picture in the random access unit including the first I-picture;

25 a parameter set decoding unit operable to decode the coded first parameter set extracted in said extracting unit; and

a picture decoding unit operable to decode, using the decoded first parameter set, a current coded picture to be decoded which is included in the random access unit and which is located after the first I-picture in coding order.

30

6. A moving picture decoding apparatus according to Claim 5, wherein:

said extracting unit is operable to extract a coded second parameter set located before the coded first I-picture in the random access unit including the first I-picture;

said parameter set decoding unit is operable to decode the
5 coded second parameter set; and

said picture decoding unit is operable to decode the first I-picture using the decoded second parameter set.

7. A recording method for recording a coded stream in which a
10 video signal is coded on a picture-by-picture basis, onto a computer-readable recording medium,

wherein said recording method comprises the following steps performed when coding a current picture to be coded which is included in a random access unit including: pictures belonging to a
15 group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture which is a second random access point; and parameter sets for decoding the pictures, the current picture being located after the first I-picture in coding order,

20 said recording method comprises:

a first coding step of coding a parameter set selected for decoding the current picture to be coded;

a second coding step of coding the current picture to be coded based on the contents included in the selected parameter set; and

25 a coded stream generating step of generating a coded stream so that the selected and coded parameter set is located before the coded first picture in the random access unit including the first I-picture, the selected and coded parameter set being unnecessary for the first I-picture; and

30 a recording step of recording the coded stream (Str) onto the recording medium.

8. A moving picture decoding system which reads a coded stream from a computer-readable recording medium on which the coded stream is recorded, and decodes the coded stream, the coded stream being generated by coding a random access unit including:
- 5 pictures belonging to a group of pictures starting with a first I-picture which is a first random access point and ending with a picture located immediately-before a second I-picture which is a second random access point; and parameter sets for decoding the pictures,
- 10 wherein the coded stream recorded on the recording medium includes:
- coded I-picture data which said moving picture decoding system uses to decode the first I-picture;
- a coded first parameter set which said moving picture
- 15 decoding system uses to decode the coded first I-picture data;
- coded succeeding picture data which said moving picture decoding system uses to decode the succeeding picture which is included in the random access unit and which succeeds the first I-picture; and
- 20 a coded second parameter set which said moving picture decoding system uses to decode a coded succeeding picture,
- wherein the coded succeeding picture data is located after the coded first I-picture in the random access unit including the first I-picture, and
- 25 the coded first parameter set and the coded second parameter set are located before the coded first I-picture in the random access unit including the first I-picture, and
- wherein said moving picture decoding system which reads the coded stream from the recording medium and decodes the coded
- 30 stream comprises:
- a first extracting unit operable to extract a coded first parameter set located before the coded first I-picture in the random

- access unit including the first I-picture;
 - a first parameter set decoding unit operable to decode the coded first parameter set extracted in said extracting unit;
 - a first picture decoding unit operable to decode the coded first
- 5 I-picture using the decoded first parameter set;
 - a second extracting unit operable to extract a coded second parameter set located before the coded first I-picture in the random access unit including the first I-picture;
 - a second parameter set decoding unit operable to decode the
- 10 coded second parameter set extracted in said second extracting unit; and
 - a second picture decoding unit operable to decode, using the decoded second parameter set, the coded succeeding picture which is included in the random access unit and which is located after the
- 15 first I-picture in coding order.

【書類名】 特許請求の範囲

【請求項 1】

動画像信号をピクチャ単位で符号化して符号化ストリームを生成する動画像符号化方法であって、

- 5 ランダムアクセスポイントとなる第 1 の I ピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第 2 の I ピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットに含まれ、かつ、符号化順において前記第 1 の I ピクチャよりも後ろに位置する符号化対象ピクチャを符号化する際に、

- 10 前記符号化対象ピクチャの復号化のために選択されたパラメータセットの符号化を行う第 1 の符号化ステップと、

前記選択されたパラメータセットに含まれる内容に基づいて前記符号化対象ピクチャの符号化を行う第 2 の符号化ステップと、

- 15 前記第 1 の I ピクチャが使用しない符号化された前記選択されたパラメータセットを、前記第 1 の I ピクチャを含むランダムアクセスユニット内において、符号化された前記第 1 の I ピクチャよりも前に位置するよう符号化ストリームを生成する符号化ストリーム生成ステップと、

を含むことを特徴とする動画像符号化方法。

【請求項 2】

- 20 ランダムアクセスポイントとなる第 1 の I ピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第 2 の I ピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットを符号化して生成された符号化ストリームを復号化して動画像信号を生成する動画像復号化方法において、

- 25 前記第 1 の I ピクチャを含むランダムアクセスユニット内において、符号化された前記第 1 の I ピクチャよりも前に位置する符号化された第 1 のパラメータセットの抽出を行う抽出ステップと、

前記抽出ステップにおいて抽出された、前記符号化された第 1 のパラメータセットの復号を行うパラメータセット復号化ステップと、

- 30 前記復号化された前記第 1 のパラメータセットを用いて、符号化順において前記第 1 の I ピクチャよりも後ろに位置し、かつ、前記ランダムアクセスユニットに含まれる符号化された復号化対象ピクチャの復号を行うピクチャ復号化ステップと、

を含むことを特徴とする動画像復号化方法。

【請求項 3】

- 35 前記動画像復号化方法は、更に、

前記第 1 の I ピクチャを含むランダムアクセスユニット内において、符号化された前記第 1 の I ピクチャよりも前に位置する符号化された第 2 のパラメータセットの抽出を行う第 2 の抽出ステップと、

符号化された前記第2のパラメータセットの復号を行う第2のパラメータセット復号化ステップと、

前記復号化された第2のパラメータセットを用いて、符号化された前記第1のIピクチャの復号を行う第2のピクチャ復号化ステップと、

- 5 を含むことを特徴とする請求項2に記載の動画像復号化方法。

【請求項4】

動画像信号をピクチャ単位で符号化して符号化ストリームを生成する動画像符号化装置であって、

- 10 ランダムアクセスポイントとなる第1のIピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第2のIピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットに含まれ、かつ、符号化順において前記第1のIピクチャよりも後ろに位置する符号化対象ピクチャを符号化する際に、

- 15 前記符号化対象ピクチャの復号化のために選択されたパラメータセットの符号化を行う第1の符号化手段と、

前記選択されたパラメータセットに含まれる内容に基づいて前記符号化対象ピクチャの符号化を行う第2の符号化手段と、

- 20 前記第1のIピクチャが使用しない符号化された前記選択されたパラメータセットを、前記第1のIピクチャを含むランダムアクセスユニット内において、符号化された前記第1のIピクチャよりも前に位置するよう符号化ストリームを生成する符号化ストリーム生成手段と、
を含むことを特徴とする動画像符号化装置。

【請求項5】

- 25 ランダムアクセスポイントとなる第1のIピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第2のIピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットを符号化して生成された符号化ストリームを復号化して動画像信号を生成する動画像復号化装置において、

- 30 前記第1のIピクチャを含むランダムアクセスユニット内において、符号化された前記第1のIピクチャよりも前に位置する符号化された第1のパラメータセットの抽出を行う抽出手段と、

前記抽出手段において抽出された、前記符号化された第1のパラメータセットの復号を行うパラメータセット復号化手段と、

- 35 前記復号化された前記第1のパラメータセットを用いて、符号化順において前記第1のIピクチャよりも後ろに位置し、かつ、前記ランダムアクセスユニットに含まれる符号化された復号化対象ピクチャの復号を行うピクチャ復号化手段と、
を含むことを特徴とする動画像復号化装置。

【請求項6】

前記抽出手段は、前記第1のIピクチャを含むランダムアクセスユニット内において、符号

化された前記第1のIピクチャよりも前に位置する符号化された第2のパラメータセットの抽出を行い、

前記パラメータセット復号化手段は、符号化された前記第2のパラメータセットの復号を行い、

- 5 前記Iピクチャ復号化手段は、前記復号化された第2のパラメータセットを用いて、符号化された前記第1のIピクチャの復号を行う

ことを特徴とする請求項5に記載の動画像復号化装置。

【請求項7】

- 10 動画像信号をピクチャ単位で符号化した符号化ストリームをコンピュータ読み取り可能な記録媒体に記録する記録方法であって、

ランダムアクセスポイントとなる第1のIピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第2のIピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットに含まれ、かつ、符号化順において前記第1のIピクチャよりも後ろに位置する符号化対象ピクチャを符号化する際に、

- 15 前記符号化対象ピクチャの復号化のために選択されたパラメータセットの符号化を行う第1の符号化ステップと、

前記選択されたパラメータセットに含まれる内容に基づいて前記符号化対象ピクチャの符号化を行う第2の符号化ステップと、

- 20 前記第1のIピクチャが使用しない符号化された前記選択されたパラメータセットを、前記第1のIピクチャを含むランダムアクセスユニット内において、符号化された前記第1のIピクチャよりも前に位置するよう符号化ストリームを生成する符号化ストリーム生成ステップと、

前記符号化ストリームを記録媒体に記録する記録ステップと、

- 25 を含むことを特徴とする記録媒体への記録方法。

【請求項8】

ランダムアクセスポイントとなる第1のIピクチャから、前記ランダムアクセスポイントとは別のランダムアクセスポイントとなる第2のIピクチャの直前のピクチャまでに属する複数のピクチャと、前記複数のピクチャを復号化するための複数のパラメータセットとで構成されるランダムアクセスユニットを符号化して生成された符号化ストリームを記録したコンピュータ読み取り可能な記録媒体から、前記符号化ストリームを読み出し復号を行う動画像復号化システムであって、

前記記録媒体に記録された符号化ストリームは、

前記動画像復号化システムが、前記第1のIピクチャを復号化するために、符号化されたIピクチャデータと、

- 35 前記動画像復号化システムが、前記符号化されたIピクチャデータを復号するための符号化された第1のパラメータセットと、

前記動画像復号化システムが、前記第1のIピクチャに後続し、かつ、ランダムアクセスユ

ニットに含まれる後続ビクチャを復号化するために、符号化された後続ビクチャデータと、
前記動画復号化システムが、前記符号化された後続ビクチャの復号に使用するための符号
化された第2のパラメータセットとを含み、

- 5 前記符号化された後続ビクチャデータは、前記第1のIビクチャを含むランダムアクセスユ
ニット内において、前記符号化された第1のIビクチャデータの後に位置し、

符号化された前記第1のパラメータセットと、符号化された前記第2のパラメータセットは、
前記第1のIビクチャを含むランダムアクセスユニット内において、前記符号化された第1の
Iビクチャよりも前に位置しており、

- 10 前記記録媒体から符号化ストリームを読み出し復号化を行う動画復号化システムは、
前記第1のIビクチャを含むランダムアクセスユニット内において、符号化された前記第1
のIビクチャよりも前に位置する符号化された第1のパラメータセットの抽出を行う第1の
抽出手段と、

前記第1の抽出手段において抽出された、前記符号化された第1のパラメータセットの復号
を行う第1のパラメータセット復号化手段と、

前記復号化された前記第1のパラメータセットを用いて、符号化された前記第1のIピクチャの復号を行う第1のピクチャ復号化手段と、

前記第1のIピクチャを含むランダムアクセスユニット内において、符号化された前記第1のIピクチャよりも前に位置する符号化された第2のパラメータセットの抽出を行う第2の抽出手段と、

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前記第2の抽出手段において抽出された、前記符号化された第2のパラメータセットの復号を行う第2のパラメータセット復号化手段と、

前記復号化された前記第2のパラメータセットを用いて、符号化順において前記第1のIピクチャよりも後ろに位置し、かつ、前記ランダムアクセスユニットに含まれる符号化された前記後続ピクチャの復号を行う第2のピクチャ復号化手段と、

10

を含むことを特徴とする動画復号化システム。

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Serial NO.:10/528,151

Filing Date: December 9, 2003

For: Video encoding method

VERIFICATION OF TRANSLATIONHonorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Atsuko FUJIHARA residing at 8-7, Shigitahigashi 1-chome, Joto-ku, Osaka-shi,
Osaka, 536-0017 Japan declares:

- (1) that she knows well both the Japanese and English languages;
- (2) that she translated all the office actions from JP2003-403158 from Japanese to English;
- (3) that the attached English translation is a true and correct translation of all the office actions from JP2003-403158 to the best of her knowledge and belief; and
- (4) that all statements made of her own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such false statements may jeopardize the validity of the application or any patent thereon.

This 2nd day of November, 2007Atsuko Fujihara

Atsuko FUJIHARA

FP03056

OFFICE ACTION

Application Number: Japanese Patent Application No. 2003-403158
Drafting Date: May/8/2007
Examiner: Motonao Hasegawa 2948 5C00
Patent Attorney: Hiromori Nii
Applicable Articles: Article 29, main paragraph, and Article 36

The present application is rejected because of the following **DETAILED ACTION**. Remarks in response to the outstanding Office Action should be filed within 60 days of the mailing date of this action.

DETAILED ACTION**Claim Rejections - Article 36 (6) (i)**

(I) The present application does not meet the requirements specified in the Article 36 (6) (i) with respect to the Claims for the following reason.

(1) The Claims include matters relating to parameter sets, the structure, generation and processing of a stream, the arrangement of information, coding, and decoding, which exceed the disclosure in the Detailed Description of the Invention of the present application.

(1) Claim 1 recites that "a coded stream generating step of generating a coded stream so that the coded parameter set which is not used for the first I-picture is located before the coded first picture in the random access unit including the first I-picture".

Each of the Detailed Description of the Invention and the drawings discloses that a parameter set is included in a random access unit (RAU) and located before an (a first) I-picture.

However, the Detailed Description of the Invention and the drawings fail

to disclose that a parameter set is located at any location before the first I-picture (in a coded stream) (the location is, for example, a location before the RAU including the first I-picture).

Some of the other claims also recite this feature.

In addition, Claim 2 recites that "an extracting step of extracting a coded first parameter set located before a coded first I-picture in the random access unit including the first I-picture"

However, the Detailed Description of the Invention and the drawings fail to disclose that a parameter set is located at any location before the first I-picture (in a coded stream), and that the parameter set is extracted and used for decoding the pictures within the RAU including the first I-picture.

Some of the other claims also recite this feature.

Accordingly, the invention according to Claim 1 to 7 is not supported by the Detailed Description of the Invention.

The Claims of the present application include a description which is not disclosed in the Detailed Description of the Invention.

Claim Rejections - Article 36 (6) (ii)

(II) The present application does not meet the requirements specified in the Article 36 (6) (ii) with respect to the Claims for the following reason.

(A) The Claims includes matters related to: parameter sets, the structure, generation and processing of a stream, the arrangement of information, and coding and decoding. The definition, technical significance, and technical range of the same are partly unclear. The particular matters in the Claims are unclear, and the technical range of the Claims is also unclear.

Unclear matters include the arrangement of parameter sets, and some of the parameter sets to be processed.

Accordingly, it is unclear what kind of stream is generated and processed (for example, decoded).

In addition, it is unclear what type of coding and decoding are performed.

(1) Claim 1 recites that "a coded stream generating step of generating a coded stream so that the coded parameter set which is not used for the first I-picture is located before the coded first picture in the random access unit including the first I-picture".

However, it is unclear as to what degree the parameter set should be located before the first I-picture.

(Should a parameter set be located before the first I-picture in the RAU including the first I-picture?)

(B) The Claims includes matters related to a recording medium. The definition, technical significance, and technical range of the same are unclear. The particular matter in the Claims is unclear, and the technical range of the Claims is also unclear.

Unclear matters include the relationship between the physical and/or logical address and a stream (for example, a parameter set in a stream).

Claim Rejections - Article 36 (6) (iv)

(III) The present application does not meet the requirements specified in the Article 36 (6) (iv) with respect to the Detailed Description of the Invention for the following reason.

(A) There is no clear indication about the technical significance of structuring the invention and executing the process as defined in the Claims.

(B) There is no clear indication about how to implement the invention defined by the Claims so as to obtain a desired advantageous effect.

Assuming that the invention defined by the Claims is Implemented (supposing that the disclosure of the Claims is "correct"), it is impossible to find out the technical significance of the invention even with reference to the Detailed

Description of the Invention.

Accordingly, assuming that the invention defined by the Claims is implemented (supposing that the disclosure of the Claims is "correct"), it is impossible to clarify how to implement the invention even with reference to the Detailed Description of the Invention.

In other words, the detailed description of the invention of the present application is too unclear and incomplete to enable a person skilled in the art to decode and reproduce a parameter set by a random access only requiring that the parameter set is located before the first I-picture (even if the parameter set is located anywhere within a stream, for example, at a location significantly forward from the RAU including the first I-picture, or at the top of the stream).

Accordingly, the Detailed Description of the Invention of the present application is not clear and complete as to enable a person skilled in the art to implement the invention defined in the Claims. Therefore, the Detailed Description of the Invention does not satisfy the requirement of the ordinance of the Ministry of Economy, Trade and Industry set forth in Article 36 (4).

Claim Rejections - Article 29 (1)

(IV) The present application does not meet the requirements specified in the Article 29 (1), main paragraph, with respect to the Claims for the following reason. Therefore, the present application is not patentable.

The Claims of the present application include matters which cannot be interpreted as being the highly advanced creation of technical ideas utilizing the laws of nature.

The Claim defining a "recording medium" among the Claims includes matters which cannot be interpreted as being the highly advanced creation of technical ideas utilizing the laws of nature.

More specifically, most of the matters in Claim 7 are related to a thing (stream) recorded on the recording medium, and the recording medium itself cannot be interpreted as having special features.

Therefore, the matters in Claim 7 cannot be interpreted as being the highly advanced creation of technical ideas utilizing the laws of nature.

<Suggestions for Amendment>

It is suggested that the Applicant should amend the Claims to include a clear indication that a parameter set is located before a first I-picture in a random access unit including the first I-picture.

It is suggested that the Applicant should delete Claim 7.

Further, the Claims of the present application include apparatus claims, but the title of the invention is "IMAGE CODING METHOD".

Note that the Suggestions for Amendment are not intended to produce any legal effects and are recommendations for overcoming the rejections. The Amendment to the Specification is left to the Applicant's discretion.

The prior art made of record

•Searched Fields IPC H04N7/24-7/68 (2006. 01)

The prior art made of record is not used for the above rejections.

If you have any questions about the details of this Office Action, contact us using the following contact information:

the Examiner, Hasegawa,
video apparatuses division, the 4th patent examination department,
TEL 03 (3581) 1101, extension 3571, and FAX 03 (3501) 1101.

整理番号:2022550292 発送番号:226674 発送日:平成19年 5月15日 1

拒絶理由通知書

特許出願の番号	特願2003-403158
起案日	平成19年 5月 8日
特許庁審査官	長谷川 泰直 2948 5C00
特許出願人代理人	新居 広守 様
適用条文	第29条柱書、第36条

この出願は、次の理由によって拒絶をすべきものである。これについて意見があれば、この通知書の発送の日から60日以内に意見書を提出して下さい。

理 由

(I) この出願は、特許請求の範囲の記載が下記の点で、特許法第36条第6項第1号に規定する要件を満たしていない。

記

(1) 特許請求の範囲には、パラメータセットに関する事項、ストリームの構成・生成・処理に関する事項、情報の配置に関する事項、符号化・復号化に関する事項に関連して、この出願の発明の詳細な説明の開示を超えるものが記載されている。

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(1) 請求項1には「前記第1のIピクチャが使用しない符号化された前記選択されたパラメータセットを、符号化された前記第1のIピクチャよりも前に位置するよう符号化ストリームを生成する符号化ストリーム生成ステップ」という記載がある。

この出願の明細書・図面には、パラメータセットを、RAU内であって、(第1の)Iピクチャよりも前の位置に配置することは開示されている。

しかし、パラメータセットを、第1のIピクチャよりも前の(符号化ストリーム内の)任意の位置(例えば、第1のIピクチャを含むRAUより前の位置)に配置することは実質的な開示がない。

他にも同様の記載のある請求項が存在する。

また、請求項2には、「符号化された前記第1のIピクチャの前に位置する符号化された第1のパラメータセットの抽出を行う抽出ステップ」という記載があ

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る。

しかし、この出願の明細書・図面には、やはり、パラメータセットを、第1のIピクチャよりも前の(符号化ストリーム内の)任意の位置に配置し(たものを前提として)、これを抽出して第1のIピクチャを含むRAU内のピクチャの復号を行うことは、実質的な開示がない。

他にも同様の記載のある請求項が存在する。

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よって、請求項1-7に係る発明は、発明の詳細な説明に記載したものではない。

この出願の特許請求の範囲の記載には、発明の詳細な説明に記載したものではないものが記載されている。

(II) この出願は、特許請求の範囲の記載が下記の点で、特許法第36条第6項第2号に規定する要件を満たしていない。

記

(A) 特許請求の範囲に記載の事項のうち、パラメータセットに関する事項、ストリームの構成・生成・処理に関する事項、情報の配置に関する事項、符号化・復号化に関する事項に、その定義・技術的意味・技術範囲が、特許請求の範囲の記載では不明確なものがあり、発明を特定する事項が特許請求の範囲の記載では不明確であり、また、発明の技術範囲も特許請求の範囲の記載では不明確である。

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例えば、以下のように不明確である。

パラメータセットの配置に不明確な点がある。

処理対象となるパラメータセットに不明確なものがある。

よって、どのようなストリームを生成・処理(復号など)するのか、不明確である。

また、どのような符号化・復号化をどのように行うのか、不明確である。

(1) 請求項1には「前記第1のIピクチャが使用しない符号化された前記選択されたパラメータセットを、符号化された前記第1のIピクチャよりも前に位置するよう符号化ストリームを生成する符号化ストリーム生成ステップ」という記載がある。

しかし、第1のIピクチャよりも前のどの程度の部分に位置させるのか、不明である。

(前記第1のIピクチャを含むRAU内の、前記第1のIピクチャよりも前に位置するのでは?)

(B) 特許請求の範囲に記載の事項のうち、媒体に関する事項に、その定義・技術的意味・技術範囲が、特許請求の範囲の記載では不明確なものがあり、発明を特定する事項が特許請求の範囲の記載では不明確であり、また、発明の技術範囲も特許請求の範囲の記載では不明確である。

(例えば、媒体上の物理的位置及び/又は論理的位置と、ストリーム(例えば、ストリーム内のパラメータセット)との関連が不明である。

(III) この出願は、発明の詳細な説明の記載が以下の点で、特許法第36条第4項に規定する要件を満たしていない。

(A) 特許請求の範囲に記載の如く発明を構成すること、処理を特許請求の範囲に記載の如く行うことの技術上の意義が不明である。

(B) 特許請求の範囲の記載によって特定される発明を、所期の効果を奏するように如何に実施するのが不明確である。

(特許請求の範囲の記載によって特定される発明を前提とすると(特許請求の範囲の記載が「正しい」と仮定すると)、そのような発明に如何なる技術的意味があるのが、明細書の発明の詳細な説明を参照しても、不明である。

また、特許請求の範囲の記載によって特定される発明を前提とすると(特許請求の範囲の記載が「正しい」と仮定すると)、そのような発明を、所期の効果を奏するように如何に実施するのが、明細書の発明の詳細な説明を参照しても、不明確である。

要するに、パラメータセットが第1のIピクチャよりも前にありさえすれば、(何処であっても、例えば、第1のIピクチャを含むRAUより遙か前の部分や、ストリームの先頭にパラメータセットが配置されていたとしても)、円満にランダムアクセスによる復号・再生が可能であるようには、この出願の明細書の発明の詳細な説明は記載されていない。

よって、この出願の発明の詳細な説明は、当業者が特許請求の範囲に記載の発明を実施することができる程度に明確かつ十分に記載されておらず、また、特許法第36条第4項の経済産業省令で定めるところによる記載もされていない。

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(IV) この出願の下記の請求項に記載されたものは、下記の点で特許法第29条第1項柱書に規定する要件を満たしていないから、特許を受けることができない。

記

この出願の特許請求の範囲には、自然法則を利用した技術的思想の創作に該当するとは認められないものが記載されている。

備考

特許請求の範囲に記載のもので、「媒体」を特定しようとする請求項に記載のものに、自然法則を利用した技術的思想の創作に該当するとは認められないものがある。

すなわち、請求項7に記載のものは、媒体に記録されるもの(ストリーム)に専ら特徴を有するものであり、媒体自体に特段の特徴が存在するとは認められない。

よって、これら請求項に記載のものは、技術的思想の創作に該当するとは認められない。

<補正等の示唆>

パラメータセットが、第1のIピクチャを含むランダムアクセスユニット内の、前記第1のIピクチャよりも前に位置することを特許請求の範囲の記載で明示してはいかがですか？

請求項7は削除してはいかがでしょうか？

また、この出願の特許請求の範囲には装置の発明も記載されていますが、発明の名称は「画像符号化方法」となっています。

なお、上記の補正等の示唆は法律的效果を生じさせるものではなく、拒絶理由を解消するための一案です。明細書等をどのように補正するかは出願人が決定すべきものです。

先行技術文献調査結果の記録

・調査した分野 IPC H04N7/24-7/68 (2006.01)

この先行技術文献調査結果の記録は、拒絶理由を構成するものではありません。

この拒絶理由通知の内容に関するお問い合わせがございましたら、下記までご連絡下さい。

特許審査第四部 映像機器 担当：長谷川
TEL 03(3581)1101 内線 3581 FAX 03(3501)0715

Disclaimer:

This English translation is produced by machine translation and may contain errors. The JPO, the INPIT, and those who drafted this document in the original language are not responsible for the result of the translation.

Notes:

1. Untranslatable words are replaced with asterisks (****).
2. Texts in the figures are not translated and shown as it is.

Translated: 00:02:33 JST 12/14/2007

Dictionary: Last updated 11/16/2007 / Priority:

Decision to Grant a Patent

Application number: Application for patent 2003-403158

Date of Drafting: Heisei 19(2007) July 19

Patent examiner: HASEGAWA, Sunao 2948 5C00

Title of invention: The picture coding method

The number of claims: 8

Applicant: MATSUSHITA ELECTRIC INDUSTRIAL CO. LTD.

Representative: NII, Hiromori

This application is to be granted a patent as there is no reason for refusal.

Director General(p.p.) Director(p.p.) Examiner Assistant examiner Manager for Determination of Classification KAWASAKI, Hiroshi HASEGAWA, Sunao HATANAKA, Takayuki 8944 2948 9468

1. Distinction of Patent: Usually
2. Reference documents: **
3. Application of Patent Law, Section 30: Nothing
4. Change of Title of Invention: Nothing
5. International Patent Classification (IPC)
H04N 7/13 Z
6. Deposition of Microorganism
7. Display of Purport that Retroactivity of Filing Date is not Accepted

Decision to Grant a Patent(Memorandum)

Application number: Application for patent 2003-403158

1. Technical Fields to Be Searched (IPC, DB Name)

H04N 7/24-7/68,H04N 5/91-5/93

2. Reference patent documents

JP,2001-285800,A (JP, A) JP,6-217281,A (JP, A) JP,2000-152236,A (JP, A) JP,2002-010186,A (JP, A) JP,2002-10213,A (JP, A) JP,2002-158974,A (JP, A)

3. Reference books and magazines

[Translation done.]